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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/597,631

08/02/2006

Asaf Evenhaim

4214

24271 7590 05/11/2010  
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EXAMINER

MOORTHY, ARAVIND K

ART UNIT

PAPER NUMBER

2431

MAIL DATE

DELIVERY MODE

05/11/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/597,631	<b>Applicant(s)</b> EVENHAIM, ASAF	
	<b>Examiner</b> ARAVIND K. MOORTHY	<b>Art Unit</b> 2431	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

1. This is in response to the amendment filed on 2 February 2010.
2. Claims 1-12 are pending in the application.
3. Claims 1-12 have been rejected.
4. Claim 13 has been cancelled.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 11 and 12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Independent claim 11 is directed towards a program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for "aggregator" data processor functions in a Privacy Preserving Data-Mining Protocol. Independent claim 12 is directed towards a program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for "source-entity" data processor functions in a Privacy Preserving Data-Mining Protocol. After a review of the specification, the examiner has found no support for the program storage device, as claimed, as being hardware. The examiner suggests incorporating the term "non-transitory" in the preamble to overcome the rejection.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-4, 9, 11 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Goldberg et al US 2005/0004911 A1 (hereinafter Goldberg).

As to claim 1, Goldberg discloses a Privacy Preserving Data-Mining Protocol, operating between a secure "aggregator" data processor and at least one of "source-entity" data processor, wherein the "aggregator" and the "source-entity" processors are interconnected via an electronic data-communications topology, and the protocol includes the steps of:

A) on the side of the "aggregator" processor:

(i) from a user interface--accepting a query against a plurality of the predetermined attributes and therewith forming a parameter list (i.e. graphical condition builder) [0027],

(ii) via the topology--transmitting the parameter list to each of the "source-entity" processors (i.e. search engines) [0034],

(iii) via the topology--receiving a respective file from each of the "source-entity" processors [0049],

(iv) aggregating the plurality of files into a data-warehouse (i.e. grouping) [0056],

(v) using the parameter list, extracting query relevant data from the data-warehouse (i.e. filtering) [0056],

(vi) agglomerating the extract (i.e. grouping) [0062-0063],  
and

(vii) to a user interface--reporting the agglomerated extract [0065-0067]; and

B) on the side of each processor of the at least one "source-entity" processors:

(i) accumulating data-items wherein some of the data-items have privacy sensitive micro-data [0056],

(ii) organizing the data-items using the plurality of predetermined attributes [0057],

(iii) via the topology--receiving a parameter list from the "aggregator" processor [0063],

(iv) forming a file by "crunching together" the data-items according to the parameter list [0063],

(v) filtering out portions of the file which characterize details particular to less than a predetermined quantity of micro-data-specific data-items [0064], and

(vi) via the topology--transmitting the file to the "aggregator" processor [0064].

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As to claim 2, Goldberg discloses that transmitting the parameter list includes transmitting a sufficiently large list of identity disclosing specifics [0053].

As to claim 3, Goldberg discloses that agglomerating the extract includes filtering out portions of the extract which characterize details particular to less than a predetermined quantity data-items [0054].

As to claim 4, Goldberg discloses that filtering out portions of the extract which characterize details particular to less than a predetermined quantity data-items includes the predetermined quantity being selected from the list, ordinal number, percentage of instances in the data-warehouse, data instances outside of mean plus predetermined number of standard distribution units [0094].

As to claim 5, Goldberg discloses that agglomerating the extract includes filtering out portions of the extract so that only identity-free micro-data remains [0101].

As to claim 9, Goldberg discloses that filtering out portions of the file which characterize details particular to less than a predetermined quantity of micro-data-specific data-items includes selecting the predetermined quantity from the list, an ordinal number, a percentage of instances in the data-warehouse, data instances outside of statistical mean-or-median plus-and/or-minus a predetermined number of standard deviation units [0094].

As to claim 11, Goldberg discloses a program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for "aggregator" data processor functions in a Privacy Preserving Data-Mining Protocol, the method steps including:

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(i) from a user interface--accepting a query against a plurality of the predetermined attributes and therewith forming a parameter list (i.e. graphical condition builder) [0027],

(ii) via an electronic data-communications topology--transmitting the parameter list to at least one "source-entity" processors (i.e. search engines) [0034],

(iii) via the topology--receiving a respective file from each of the "source-entity" processors [0049],

(iv) aggregating the plurality of files into a data-warehouse (i.e. grouping) [0056],

(v) using the parameter list, extracting query relevant data from the data-warehouse (i.e. filtering) [0056],

(vi) agglomerating the extract (i.e. grouping) [0062-0063], and

(vii) to a user interface--reporting the agglomerated extract [0065-0067].

As to claim 12, Goldberg discloses a program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for "source-entity" data processor functions in a Privacy Preserving Data-Mining Protocol, the method steps including:

(i) accumulating data-items wherein some of the data-items have privacy sensitive micro-data [0056],

(ii) organizing the data-items using the plurality of predetermined attributes [0057],

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(iii) via an electronic data-communications topology--receiving a parameter list from an "aggregator" processor [0063],

(iv) forming a file by "crunching together" the data-items according to the parameter list [0063],

(v) filtering out portions of the file which characterize details particular to less than a predetermined quantity of micro-data-specific data-items [0064],

(vi) via the topology--transmitting the file to the "aggregator" processor [0064].

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al US 2005/0004911 A1 (hereinafter Goldberg) as applied to claim 1 above, and further in view of Hart et al U.S. Patent No. 6,269,404 B1 (hereinafter Hart).

As to claim 6, Goldberg does not teach that accepting a query includes performing a preprocessing privacy check against a predetermined source-entity data-ensemble model.

Hart teaches conducting a privacy check by using a privacy checking algorithm [column 8, lines 56-64].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Goldberg so that a privacy check would have been



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conducted by using a privacy checking algorithm against a predetermined source-entity data-ensemble model.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Goldberg by the teaching of Hart because it improves flexibility of network architectures by managing the flow of traffic within virtual LANs [column 4, lines 53-55].

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al US 2005/0004911 A1 (hereinafter Goldberg) as applied to claim 1 above, and further in view of Terada et al U.S. Patent No. 5,794,042 (hereinafter Terada).

As to claim 7, Goldberg does not teach that "crunching together" the data-items includes joining data-items having a mutual micro-data-specific.

Terada teaches joining data items having mutual data [column 21, lines 11-51].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Goldberg so that "crunching together" the data-items would have included joining data-items having a mutual micro-data-specific.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Goldberg by the teaching of Terada because it increases efficiency in software development [column 1, lines 60-61].

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al US 2005/0004911 A1 (hereinafter Goldberg) as applied to claim 1 above, and further in view of Chaudhuri et al US 2004/0260694 A1 (hereinafter Chaudhuri).

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As to claim 8, Goldberg discloses selected from the list of sub-steps aggregating, extracting, agglomerating, accumulating, organizing, and crunching (i.e. organizing) [0062-0063].

Goldberg does not teach that at least one sub-step includes fuzzy matching.

Chaudhuri teaches fuzzy matching and the benefits of using such [0028].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Goldberg so that there would have been organizing and fuzzy matching as sub-steps.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Goldberg by the teaching of Chaudhuri because it provides a strong foundation for adding domain-specific enhancements [0010].

11. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al US 2005/0004911 A1 (hereinafter Goldberg) as applied to claim 1 above, and further in view of Chan U.S. Patent No. 7,111,237 B2.

As to claim 10, Goldberg does not teach that accepting a query includes transforming the query into a standardized query-capable of resulting in a syndicated reporting of the agglomerated extract.

Chan teaches transforming a query into a standardized query [column 6, lines 33-65].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Goldberg so that accepting a query would have included transforming the query into a standardized query-capable of resulting in a syndicated reporting of the agglomerated extract.

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It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Goldberg by the teaching of Chan because it enables a user enters a search entry in a language other than the principal language used in the document to be searched and automatically highlights each matching phrase or matching object in the search result with a callout or bubble which contains an artificial intelligence based bilingual annotation on the matching phrase or matching object [column 3, lines 41-48].

### ***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARAVIND K. MOORTHY whose telephone number is (571)272-3793. The examiner can normally be reached on Monday-Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Aravind K Moorthy/

Examiner, Art Unit 2431